AMENDMENTS TO THE CLAIMS

In addition to the claim amendments requested in the Preliminary Amendment and Supplemental Preliminary Amendment, both mailed September 30, 2003, please amend claims 4, 12, and 18, add new claims 33-36, and cancel claims 1-3 without prejudice as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application. Please cancel claims 1-3 without prejudice to their pursuit in an appropriate continuation or divisional application.

Listing of the claims:

1. – 3. (canceled)

4 (currently amended). A dry substrate for lysing cells and purifying nucleic acid therefrom consisting of:

a. -a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon-;

b. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis; and

c. an indicator ~~means~~ for indicating the presence of nucleic acid, which is maintained on the solid matrix.

5 (original). The substrate according to claim 4, wherein said indicator means is selected from the group consisting essentially of a fluorescent indicator, color indicator or photometric indicator.

6 (original). The substrate according to claim 4, wherein said substrate is in a shape selected from the group consisting essentially of a swab, a sheet, a card, and a ball.

7 (original). The substrate according to claim 6, wherein said substrate further includes an integrity maintenance means.

8 (original). The substrate according to claim 7, wherein when said substrate is a sheet, said integrity maintenance means is a plastic bag.

9 (previously presented). A method of purifying nucleic acid comprising the steps of:

a. providing a dry substrate comprising:

i. a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon; and

ii. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis;

b. applying to the substrate a sample comprising nucleic acid;

c. capturing the nucleic acid with the substrate;

d. optionally, fixing the nucleic acid to the substrate;

e. treating the nucleic acid, which is maintained on the substrate, with an external substance which generates a signal in an assay; and

f. generating a signal to indicate the presence of the nucleic acid, which is maintained on the substrate.

10 (previously presented). The method according to claim 9, wherein the signal of generating step f comprises a fluorescent signal, color indicator or photometric indicator.

11 (previously presented). The method according to claim 9, further comprising:

g. analyzing the amount of nucleic acid captured and maintained on the substrate by quantifying the generated signal.

12 (currently amended). A kit for purifying nucleic acid comprising:

a. a ~~coated matrix~~ a dry substrate comprising:

i. a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon; and

ii. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis; and

iii. an indicator for indicating the presence of nucleic acid, which is maintained on the solid substrate; and

b. an integrity maintenance means for preserving the matrix and purifying nucleic acid.

13 (previously presented). The kit according to claim 12, wherein said coated matrix is in a shape selected from the group consisting essentially of a swab, a sheet, a card, and a ball.

14 (previously presented). The kit according to claim 12, wherein said coated matrix is in a shape selected from the group consisting essentially of a plastic bag, cellophane, a sealable container, cartridge and parafilm.

15 (original). A substrate for labeling blood transfusion bags consisting of a matrix, a coating and an integrity maintenance means.

16 (original). A blood card for labeling blood transfusion bags comprising a matrix, a coating and an integrity maintenance means.

17 (previously presented). The blood card according to claim 16, wherein said card further includes an indicator means for indicating the presence of nucleic acid.

18 (currently amended). The method according to claim 9, wherein in generating step f, the signal is generated with an [[of]] amount <u>of</u> cells at a concentration of at least 0.33 cell/μl.

19 (previously presented). The method according to claim 9, wherein the coating of step a further comprises:

a. a weak base;

b. a chelating agent; and

c. optionally, uric acid or a urate salt.

20 (previously presented). The method according to claim 19, wherein the weak base comprises Tris, the chelating agent comprises ethylenediaminetetracetic acid (EDTA), and the anionic surfactant or detergent comprises sodium dodecyl sulfate (SDS).

21 (previously presented). The method according to claim 9, wherein the nucleic acid comprises DNA.

22 (previously presented). The method according to claim 9, wherein the external substance of step e comprises an antibody.

23 (previously presented). The method according to claim 9, wherein the nucleic acid comprises human DNA and the external substance of step e comprises an antibody which recognizes human DNA.

24 (previously presented). The method according to claim 9, wherein the sample of step b comprises blood or a blood product, semen, sweat, saliva, urine, water, stool, sputum, cell culture, or cell lysate.

25 (previously presented). A method of purifying and analyzing DNA in a blood sample, wherein the method comprises the steps of:

a. providing a dry substrate comprising:

i. a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon; and

ii. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis;

b. applying to the substrate a blood sample comprising DNA;

c. capturing the DNA with the substrate;

d. optionally, fixing the DNA to the substrate;

e. treating the DNA which is maintained on the substrate with an external substance which generates a signal in an assay;

f. generating a signal to indicate the presence of DNA captured and maintained on the substrate; and

g. analyzing the amount of DNA captured and maintained on the substrate by quantifying the generated signal.

26 (previously presented). The method according to claim 25, wherein the blood sample comprises blood or a blood product.

27 (previously presented). The method according to claim 25, wherein the signal of generating step f comprises a fluorescent signal, color indicator or photometric indicator.

28 (previously presented). The method according to claim 25, wherein in generating step f, the signal is generated with an amount of cells at a concentration of at least 0.33 cells/μl.

29 (previously presented). The method according to claim 25, wherein the coating of step a further comprises:

a. a weak base;

b. a chelating agent; and

c. optionally, uric acid or a urate salt.

30 (previously presented). The method according to claim 29, wherein the weak bases comprises Tris, the chelating agent comprises ethylenediamine tetracetic acid (EDTA), and the anionic detergent or surfactant comprises sodium dodecyl sulfate (SDS).

31 (previously presented). The method according to claim 25, wherein the external substance of step e comprises an antibody.

32 (previously presented). The method according to claim 25, wherein the DNA comprises human DNA and the external substance of step e comprises an antibody which recognizes human DNA.

33 (new). The method according to claim 9, wherein the signal of generating step f is associated with the nucleic acid maintained on the substrate.

34 (new). The method according to claim 9, wherein the nucleic acid comprises mRNA.

35 (new). The method according to claim 9, wherein the nucleic acid comprises human mRNA and the external substance of step e comprises an antibody which recognizes human RNA or DNA.

36 (new). The method according to claim 25, wherein the signal of generating step f is associated with the DNA captured and maintained on the substrate.